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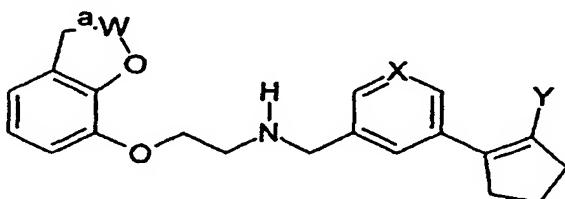
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As printed

(54) Title: 3-(CYCLOPENTEN-1-YL)-BENZYL- OR 3-(CYCLOPENTEN-1-YL)-HETEROARYLMETHYL-AMINE DERIVATIVES AND USE THEREOF AS MEDICINES FOR TREATING SCHIZOPHRENIA

(54) Titre : DERIVES DE 3-(CYCLOPENTEN-1-YL)-BENZYL- OU 3-(CYCLOPENTEN-1-YL)-HETEROARYLME-THYL-AMINES ET LEUR UTILISATION A TITRE DE MEDICAMENTS POUR LE TRAITEMENT DE LA SCHIZOPHRENIE



(1)

(57) Abstract: The invention concerns compounds of general formula (1) wherein: (a) represents a single bond or a double bond; W represents a CH, CH<sub>2</sub>, CHCH<sub>3</sub>, CCH<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub> group, a C(CH<sub>2</sub>)<sub>2</sub> group (i.e., a carbon atom bearing two methylene groups bound together to form a spiro-cyclopropane unit) or a C(CH<sub>2</sub>)<sub>3</sub> group (i.e., a carbon atom bearing two methylene groups bound together to form a spiro-cyclobutane unit) provided that when (a) is a double bond then W exclusively represents a CH<sub>2</sub>, CHCH<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub>, C(CH<sub>2</sub>)<sub>2</sub> or C(CH<sub>2</sub>)<sub>3</sub> group; X is a carbon atom bearing a hydrogen atom or a fluorine atom, their additive salts and optionally the hydrates of additive salts with pharmaceutically acceptable mineral acids or organic acids as well as their tautomeric forms, pure enantiomers and enantiomer mixtures whether racemic or not.

WO 2004/035561 A1 then W exclusively represents a CH or CCH<sub>3</sub> group and when (a) is a single bond, then W exclusively represents a CH<sub>2</sub>, CHCH<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub>, C(CH<sub>2</sub>)<sub>2</sub> or C(CH<sub>2</sub>)<sub>3</sub> group; X is a carbon atom bearing a hydrogen atom or a fluorine atom, their additive salts and optionally the hydrates of additive salts with pharmaceutically acceptable mineral acids or organic acids as well as their tautomeric forms, pure enantiomers and enantiomer mixtures whether racemic or not.

(57) Abrégé : L'invention concerne des composés de formule générale (1) dans laquelle : (a) représente une liaison simple ou une liaison double; W représente un groupe CH, CH<sub>2</sub>, CHCH<sub>3</sub>, CCH<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub>, un groupe C(CH<sub>2</sub>)<sub>2</sub> (i.e., un atome de carbone portant deux groupes méthylènes liés entre eux de manière à former un motif spiro-cyclopropane) ou C(CH<sub>2</sub>)<sub>3</sub> (i.e., un atome de carbone portant deux groupes méthylènes liés à un autre groupe méthylène de manière à former un motif spiro-cyclobutane) avec la réserve, toutefois, que lorsque (a) est une liaison double alors W représente exclusivement un groupe CH ou CCH<sub>3</sub> et que, lorsque (a) est une liaison simple, alors W représente exclusivement un groupe CH<sub>2</sub>, CHCH<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub>, C(CH<sub>2</sub>)<sub>2</sub> ou C(CH<sub>2</sub>)<sub>3</sub>; X est un atome de carbone portant un atome d'hydrogène (CH) ou un atome d'azote; Y est un atome d'hydrogène ou un atome de fluor; leurs sels d'addition et éventuellement les hydrates des sels d'addition avec les acides minéraux ou les acides organiques pharmaceutiquement acceptables ainsi que leurs formes tautomères, les énantiomères purs et les mélanges d'énantiomères racémique ou non.

*before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/03053

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D307/86 C07D307/94 C07D405/12 C07D213/48 C07C47/548  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data, BEILSTEIN Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category <sup>a</sup>	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 58527 A (EGYT GYOGYSZERVEGYESZETI GYAR ;IVANICSNE MEGYERI KATALIN (HU); MIK) 18 November 1999 (1999-11-18) claims ---	1-6
A	WO 00 58282 A (KOEK WOUTER ;PF MEDICAMENT (FR); VACHER BERNARD (FR); CUISIAT STEP) 5 October 2000 (2000-10-05) cited in the application claims ---	1-6
A	WO 99 51575 A (AMERICAN HOME PROD) 14 October 1999 (1999-10-14) cited in the application claims --- -/-	1-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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## INTERNATIONAL SEARCH REPORT

International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>CHEMICAL ABSTRACTS, vol. 119, no. 17, 25 October 1993 (1993-10-25) Columbus, Ohio, US; abstract no. 180657, YANUSAGA T. ET AL: "Preparation of (hetero)aryloxyalkylamine derivatives having selective affinity to serotonin (5-HT 1A)receptors" XP002245145 abstract &amp; JP 05 125024 A (YAMANOUCHI PHARMA CO LTD) 21 May 1993 (1993-05-21) cited in the application</p> <p>_____</p>	1-6

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/03/03053

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